Environmental Study Process

Consideration of a Proposed Action under the National Environmental Policy Act (NEPA)

NEPA requires that the FAA evaluate the environmental and related social and economic effects of a proposed action.

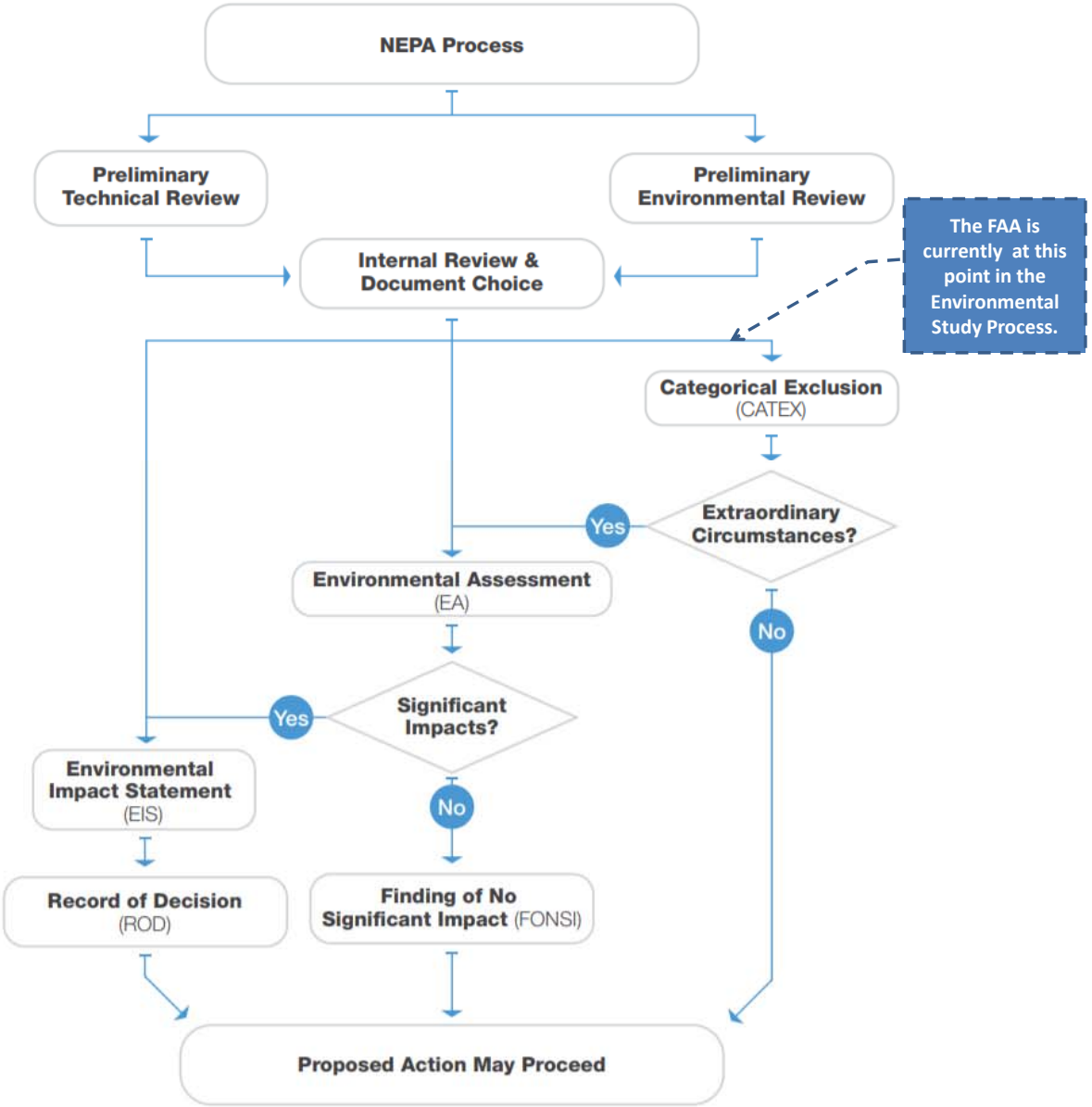
Preliminary Technical Review
FAA conducts an internal technical review before deciding to consider moving forward with an environmental review.

Preliminary Environmental Review
FAA conducts an internal environmental review to evaluate any potential environmental concerns.

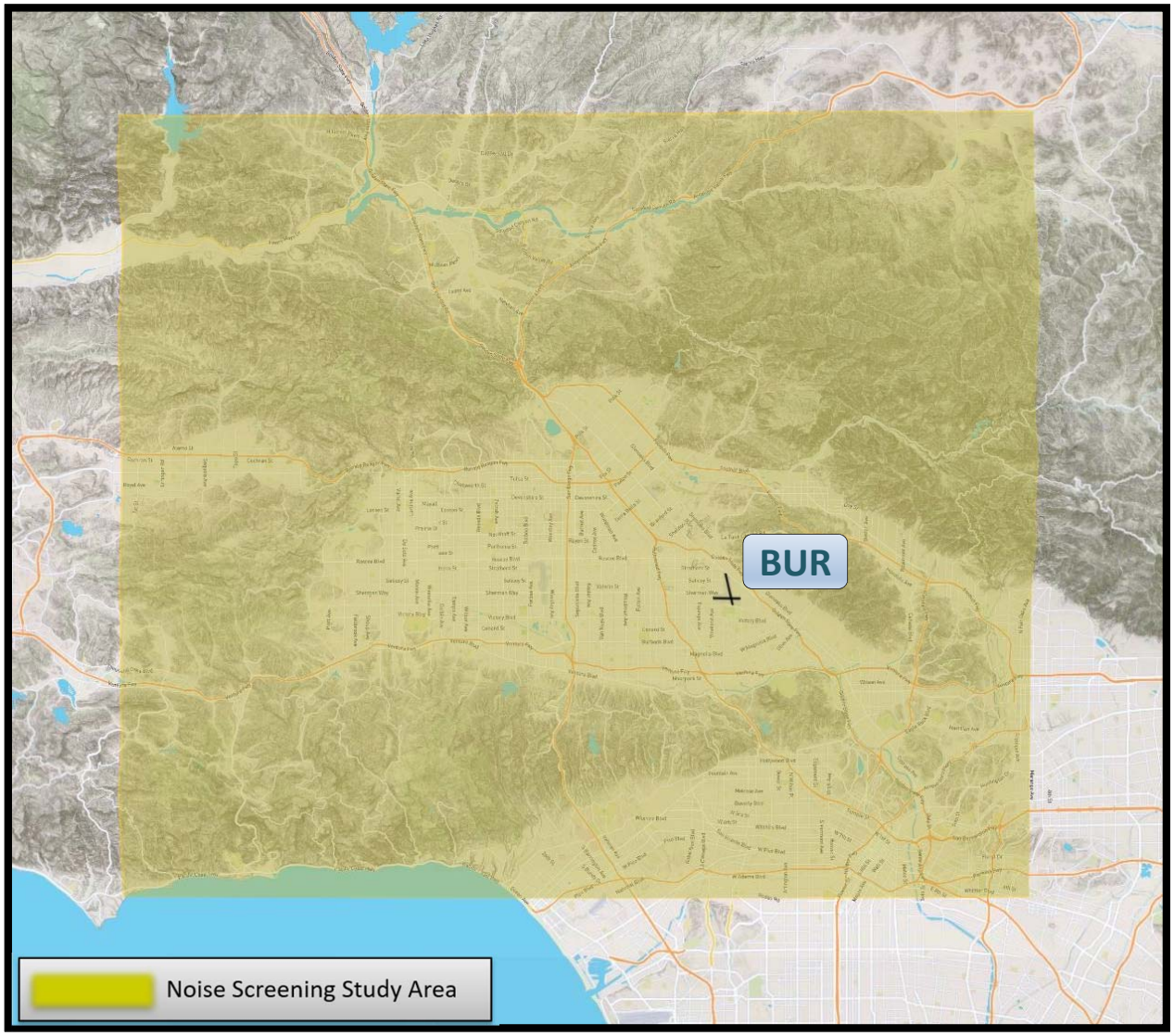
Internal Review and choice of appropriate level of NEPA review
Internal analysis such as the noise screening reports as well as input from the public are used to assist the FAA in determining the appropriate level of NEPA review to conduct.

Extraordinary Circumstances
Paragraph 5-2 of FAA Order 1050.1F identifies the range of factors which define Extraordinary Circumstances.

Significant Impacts
The FAA uses thresholds that serve as specific indicators of significant impact for some environmental impact categories. FAA proposed actions that would result in impacts at or above these thresholds require the preparation of an EIS, unless impacts can be reduced below threshold levels.



Noise Screening - Study Area



- For the Burbank Study Area: the FAA analyzed 14,319 grid points at 0.25 nautical mile intervals over the study area
- To determine projected noise levels on the ground, the frequency of aircraft operations and the position of the aircraft in space laterally (i.e., ground tracks), and vertically (*i.e.*, altitude) are analyzed.
- Track data provides information about lateral path, aircraft types, time of day operations, runway usage percentages for departure/arrival streams and day/night traffic ratios.
- Track data from the year 2017 was used to represent average annual day air traffic counts and air traffic flows

Noise Screening Results
Measured in Day Night Average Sound Level (DNL) Decibels (dB)

- Preliminary Noise Screening Results:
  - **No** Significant Noise Increases of ±1.5 dB in the 65 DNL noise exposure level
  - **No** Reportable Noise Increases:
    - ±3 dB in DNL 60 dB to 65 dB noise exposure level
    - ±5 dB in DNL 45 dB to 60 dB noise exposure level

- DNL takes into account the noise level of each individual aircraft event, the number of times those events occur, and the time of day in which they occur.

- For the Burbank Study Area: Analyzed 14,319 grid points at 0.25 nautical mile intervals over the study area.

- Track data from the year 2017 was used to represent:
  - average annual day air traffic counts
  - and air traffic flows

- Noise screening was completed for the Proposed Action and No Action.

Noise Screening – Methodology

- To determine whether aircraft noise impacts are significant under NEPA, the FAA considers whether a change in noise associated with the proposed action exceeds defined thresholds of significance.

- The FAA uses the Day Night Average Sound Level (DNL) noise metric which reflects the aircraft noise exposure on an average annual day and is measured in decibels (dB).

- The compatibility of existing and planned land uses with aviation actions is determined in relation to the level of aircraft noise by comparing the DNL.

- DNL takes into account the noise level of each individual aircraft event, the number of times those events occur, and the time of day in which they occur.

- To account for the increased sensitivity to noise during sleeping hours (10pm - 7am), operations during these hours are weighted higher in the noise screening.

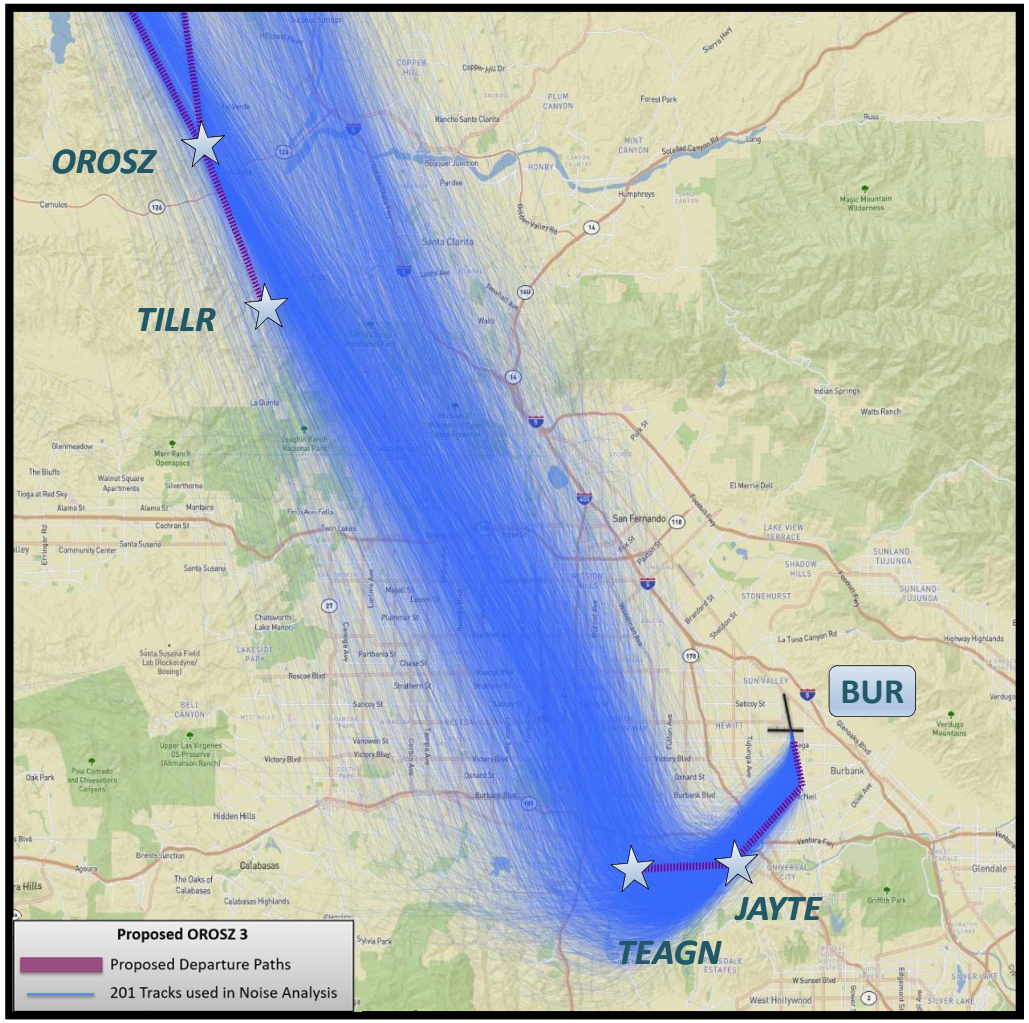
Noise Screening – Threshold Criteria

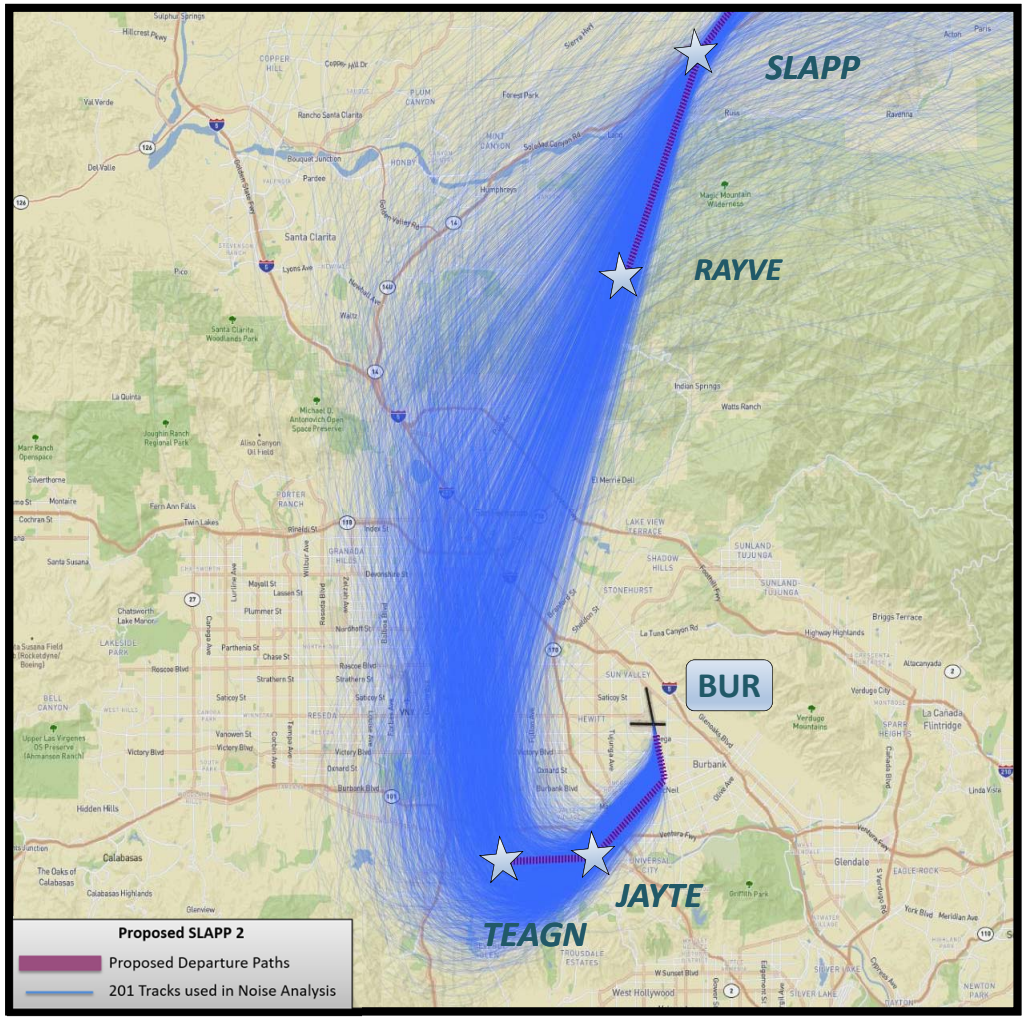
- For aircraft noise the FAA analyzes two threshold criteria: Significant and Reportable

- Significant Threshold is an increase of DNL 1.5 dB that results in a noise exposure level of DNL 65 dB or more for a noise sensitive area

- Reportable Threshold refers to changes in noise exposure levels meeting the following criteria:
  - ❑ For a change of ± 3 dB in DNL 60 dB to 65 dB noise exposure level
  - ❑ For a change of +5 dB in DNL 45 dB to 60 dB noise exposure level

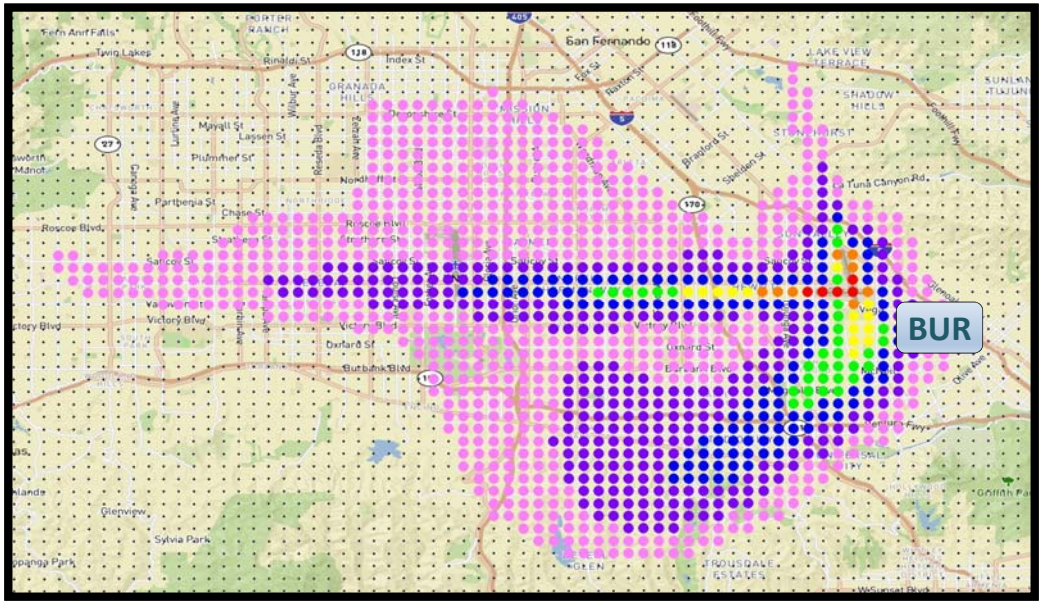
Flight Tracks used for the Noise Screening



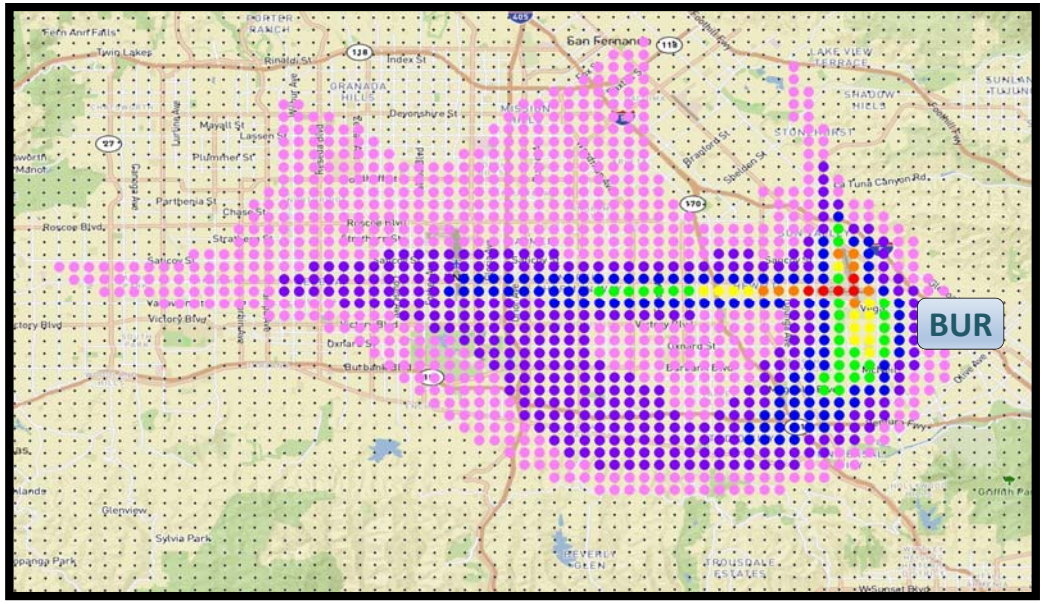


Depiction of Noise Screening Grid Point Results - DNL

Analyzed 14,319 grid points at 0.25 nautical mile intervals for the noise study area.



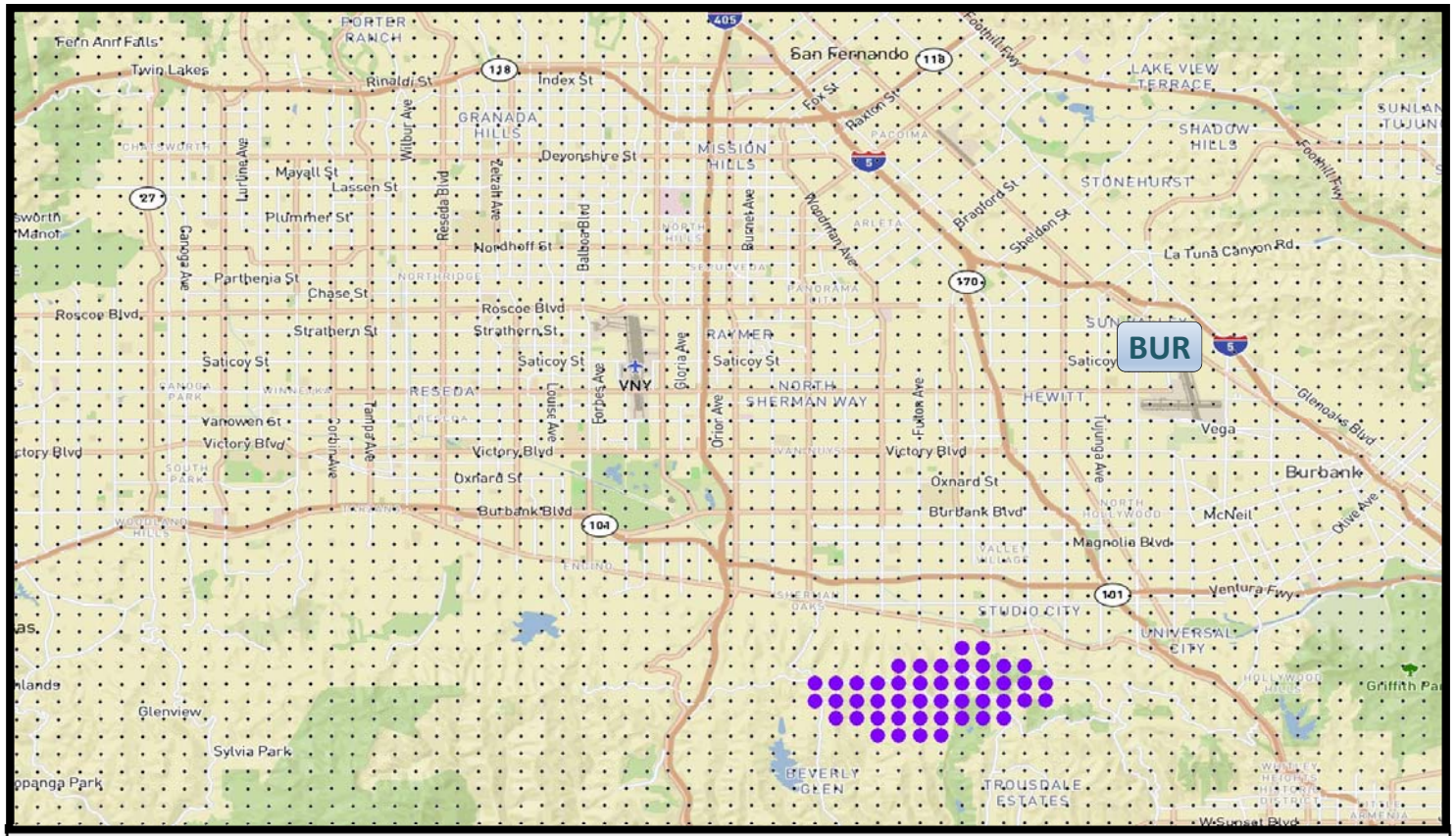
Baseline noise exposure OROSZ2 and SLAPP1



Proposed procedures OROSZ3 and SLAPP2

- Greater than 70 DNL
- 65 to 70 DNL
- 60 to 65 DNL
- 55 to 60 DNL
- 50 TO 55 DNL
- 45 to 50 DNL
- 40 to 45 DNL
- Less than 40 DNL

Noise Screening – Preliminary Results



- Potential changes in noise exposure are calculated by comparing the proposed alternative to the baseline.
- Preliminary noise screening indicates a reduction in the reportable noise threshold south of the proposed procedures.